

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

TQ DELTA, LLC, §
§
Plaintiff, §
§
v. § CIVIL ACTION NO. 2:21-CV-00310-JRG
§
§
COMMSCOPE HOLDING COMPANY, §
§
INC., COMMSCOPE INC., ARRIS §
§
INTERNATIONAL LIMITED, ARRIS §
§
GLOBAL LTD., ARRIS US HOLDINGS, §
§
INC., ARRIS SOLUTIONS, INC., and §
§
ARRIS ENTERPRISES, LLC, §
§
Defendants. §

MEMORANDUM OPINION AND ORDER

Before the Court is Plaintiff TQ Delta, LLC’s (“TQ Delta”) Motions for Judgment as a Matter of Law and for a New Trial for U.S. Patent Nos. 7,570,686 and 8,462,835 (the “Motion”). (Dkt. No. 537.) Having considered the Motion and the related briefing, and for the reasons that follow, the Court finds that the Motion should be and hereby is **DENIED**.

I. BACKGROUND

On August 13, 2021, TQ Delta filed the above-captioned lawsuit against CommScope Holding Company, Inc., CommScope Inc., Arris International Limited, Arris Global Ltd., Arris US Holdings, Inc., Arris Solutions, Inc., and Arris Enterprises, LLC (collectively, “CommScope”), asserting infringement of thirteen patents. (See Dkt. No. 1.) CommScope answered the Complaint on October 22, 2021, asserting the defenses of invalidity and noninfringement. (See Dkt. No. 17.) By the time of trial, TQ Delta had narrowed its case, and trial commenced with TQ Delta asserting infringement of claim 36 of U.S. Patent No. 7,570,686 (the “‘686 Patent”), claim 17 of U.S. Patent No. 7,453,881 (the “‘881 Patent”), claim 5 of U.S. Patent No. 8,276,048 (the “‘048 Patent”), claim 14 of U.S. Patent No. 8,090,008 (the “‘008 Patent”), claim 10 of U.S. Patent No. 8,462,835 (the

“835 Patent”), claim 18 of U.S. Patent No. 8,468,411 (the “411 Patent”), and claim 10 of U.S. Patent No. 9,154,354 (the “354 Patent”) (collectively, the “Asserted Claims”). (Dkt. No. 495 at 1.) CommScope similarly narrowed its invalidity theories to target only claim 36 of the ‘686 Patent, claim 5 of the ‘048 Patent, claim 14 of the ‘008 Patent, and claim 10 of the ‘835 Patent. (Dkt. No. 497.) CommScope asserted that claim 36 of the ‘686 Patent and claim 5 of the ‘048 Patent were invalid as obvious, and that claim 14 of the ‘008 Patent and claim 10 of the ‘835 Patent were invalid as both anticipated and obvious. (*Id.* at 2.)

On March 17, 2023, a jury trial commenced in this case. After the close of evidence on March 23, 2023, the Court took up matters from both sides under Federal Rule of Civil Procedure 50(a), where TQ Delta moved that claim 36 of the ‘686 Patent, claim 5 of the ‘048 Patent, claim 14 of the ‘008 Patent, and claim 10 of the ‘835 Patent were not proven invalid during trial. (*See* Dkt. No. 533 at 228:5-229:14, 229:15-230:24, 232:15-22.) TQ Delta’s Rule 50(a) Motions as to the ‘686, ‘048, ‘008, and ‘835 Patents were denied. On March 24, 2023, the Jury returned its verdict. (Dkt. No. 508.) In pertinent part, the Jury found that claim 36 of the ‘686 Patent and claim 10 of the ‘835 Patent were both infringed and invalid.¹ (*Id.* at 4–5.) Accordingly, on May 3, 2023, the Court entered final judgment on the verdict, ordering and entering judgment that claim 36 of the ‘686 Patent and claim 10 of the ‘835 Patent are invalid. (Dkt. No. 513 at 2.) The Court observed in footnote 1 of its judgment that:

Though the verdict indicates the Jury found these claims to be infringed, their related finding of invalidity is a defense to such infringement and the Court does not consider the infringement of these claims to be operable or compensable. The Court clearly instructed the Jury that invalidity is a defense to infringement, and the Court finds their verdict is consistent with the Court’s instructions.

¹ The Jury found that claim 5 of the ‘048 Patent was infringed and not invalid, and that claim 14 of the ‘008 Patent was not infringed and not invalid. (Dkt. No. 508 at 4–5.) The Court rendered final judgment on the verdict. (*See* Dkt. No. 513 at 2.)

(Dkt. No. 513 at 1 n.1.) TQ Delta now seeks JMOL that claim 36 off the ‘686 Patent and claim 10 of the ‘835 Patent are not invalid, asserting that the finding of infringement as to these claims should now attach, and requesting that a new trial on damages be ordered as to these two claims.

II. LEGAL STANDARD

Upon a party’s renewed motion for judgment as a matter of law following a jury verdict, the Court asks whether “the state of proof is such that reasonable and impartial minds could reach the conclusion the jury expressed in its verdict.” FED. R. CIV. P. 50(b); *Am. Home Assur. Co. v. United Space Alliance*, 378 F.3d 482, 487 (5th Cir. 2004). “The grant or denial of a motion for judgment as a matter of law is a procedural issue not unique to patent law, reviewed under the law of the regional circuit in which the appeal from the district court would usually lie.” *Finisar Corp. v. DirectTV Group, Inc.*, 523 F.3d 1323, 1332 (Fed. Cir. 2008). “A JMOL may only be granted when, ‘viewing the evidence in the light most favorable to the verdict, the evidence points so strongly and overwhelmingly in favor of one party that the court believes that reasonable jurors could not arrive at any contrary conclusion.’” *Versata Software, Inc. v. SAP Am., Inc.*, 717 F.3d 1255, 1261 (Fed. Cir. 2013) (quoting *Dresser-Rand Co. v. Virtual Automation, Inc.*, 361 F.3d 831, 838 (5th Cir. 2004)).

Under Fifth Circuit law, a court is to be “especially deferential” to a jury’s verdict, and must not reverse the jury’s findings unless they are not supported by substantial evidence. *Baisden v. I’m Ready Productions, Inc.*, 693 F.3d 491, 499 (5th Cir. 2012). “Substantial evidence is defined as evidence of such quality and weight that reasonable and fair-minded men in the exercise of impartial judgment might reach different conclusions.” *Threlkeld v. Total Petroleum, Inc.*, 211 F.3d 887, 891 (5th Cir. 2000). A motion for judgment as a matter of law must be denied “unless the facts and inferences point so strongly and overwhelmingly in the movant’s favor that reasonable

jurors could not reach a contrary conclusion.” *Baisden* 393 F.3d at 498 (citation omitted). However, “[t]here must be more than a mere scintilla of evidence in the record to prevent judgment as a matter of law in favor of the movant.” *Arismendez v. Nightingale Home Health Care, Inc.*, 493 F.3d 602, 606 (5th Cir. 2007).

In evaluating a motion for judgment as a matter of law, a court must “draw all reasonable inferences in the light most favorable to the verdict and cannot substitute other inferences that [the court] might regard as more reasonable.” *E.E.O.C. v. Boh Bros. Const. Co., L.L.C.*, 731 F.3d 444, 451 (5th Cir. 2013) (citation omitted). However, “[c]redibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge.” *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000). “[T]he court should give credence to the evidence favoring the nonmovant as well as that ‘evidence supporting the moving party that is uncontradicted and unimpeached, at least to the extent that evidence comes from disinterested witnesses.’” *Id.* at 151 (citation omitted).

III. DISCUSSION

Pursuant to Federal Rule of Civil Procedure 50(b), TQ Delta moves for renewed JMOL that claim 36 of U.S. Patent No. 7,570,686 (“the ‘686 Patent”) is not invalid as obvious and that claim 10 of U.S. Patent No. 8,462,835 (“the ‘835 Patent”) is not invalid as either anticipated or obvious. (Dkt. No. 537 at 1.) This Motion renews TQ Delta’s previous motions for the same relief raised under Federal Rule of Civil Procedure 50(a) which the Court previously denied. (See Dkt. No. 533 at 228:5-229:14, 229:15-230:24.) To the extent the Court grants the JMOLs regarding invalidity, TQ Delta also moves for a new trial on damages for CommScope’s infringement of claim 36 of the ‘686 Patent and/or claim 10 of the ‘835 Patent. (Dkt. No. 537 at 1.) CommScope responds that there is substantial evidence supporting the Jury’s verdict that the asserted claims of

the ‘686 and ‘835 Patents are invalid, necessitating denial of the Motion. (Dkt. No. 546 at 1.) The Court now turns to the substance of the Motion.

A. Claim 36 of the ‘686 Patent

TQ Delta argues that CommScope failed to present legally sufficient evidence by which a reasonable jury could have found by clear and convincing evidence that claim 36 of the ‘686 Patent was obvious under 35 U.S.C. § 102, the only proffered basis for invalidity. (Dkt. No. 537 at 1.) Specifically, TQ Delta asserts that CommScope failed to present any evidence of motivation to combine the asserted prior art or a reasonable expectation of success in doing so, and further, that all elements of claim 36 were present in the asserted prior art. (*Id.*)

i. Motivation to Combine, Reasonable Expectation of Success, and Disclosure of Element 36[b] in Prior Art Reference Combination

To demonstrate obviousness, CommScope had the burden to prove by clear and convincing evidence that a person of ordinary skill in the art (“POSITA”) at the time of the invention would have been motivated to combine the references and would have had a reasonable expectation of success in so doing. 35 U.S.C. § 103(a); *see InTouch Techs., Inc. v. VGO Commc’ns, Inc.*, 751 F.3d 1327, 1347 (Fed. Cir. 2014) (internal citations omitted). Conclusory expert testimony and/or hindsight bias are not enough to satisfy that burden. *Id.* at 1352.

At trial, the only invalidity theory CommScope pursued for claim 36 was the combination of ITU-T Temporary Document FI-071 (“FI-071” or “AT&T Combination”) and ITU-T Recommendation G.992.1 (“G.992.1” or “ADSL”). (Dkt. No. 537 at 3, citing Dkt. No. 497 at 2.) CommScope put on evidence of this theory via trial deposition of their expert, Dr. Cimini. (*Id.*) TQ Delta contends that Dr. Cimini did not mention and was not asked about the motivation to combine the asserted references in the way required to arrive at the invention recited in claim 36. (*Id.* at 3, citing Dkt. No. 532 at 153:24-154:5 and 155:21-170:15.) TQ Delta argues that at best,

Dr. Cimini's testimony "simply inventoried whether individual claim elements were purportedly found in the collective disclosures of FI-071 and G.992.1," and explained that each of the individual claim elements were known.² (*Id.* at 4.) As TQ Delta points out, simply demonstrating that each independent element of a patent was known in the prior art does not suffice, by itself, to prove obviousness. *See KSR Intern. Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007).

TQ Delta argues that CommScope put forth no evidence showing why or how a POSITA would have put together or modified the two references with a reasonable expectation of success. (*Id.* at 5.) This assertion works in tandem with TQ Delta's position that the proposed combination would not result in element 36[b], and therefore not arrive at the claimed invention. (*Id.* at 6.) According to TQ Delta, neither FI-071 nor G.992.1 describes a scheme in which diagnostic information is transmitted "using multicarrier modulation with DMT symbols that are mapped to one bit of the diagnostic message," as required by claim element 36[b]. (*Id.* at 5.)

Specifically, TQ Delta argues that although FI-071 purportedly discloses including in a diagnostic message the type of diagnostic information specified in claim element 36[d] ("frequency domain received idle channel noise information"), it does not detail a modulation scheme that would be used to transmit that information. (*Id.*, citing Dkt. No. 532 at 168:21- 169:14, 192:8-14.) Further, it argues that G.992.1 discloses the transmission of diagnostic messages, but such transmission uses the modulation scheme particular to that reference's embedded operations channel ("EOC"), which does not map DMT symbols to one bit of the diagnostic message. (*Id.*, citing Dkt. No. 532 at 193:16-22, 194:7-20.) Therefore, the proposed combination would not

² Dr. Cimini testified that the preamble of claim 36 is disclosed in G.992.1 (he also refers to G.992.1 as the "ADSL standard"). (Dkt. No. 532 at 164:4-14.) He testified that FI-071 discloses claim element 36[a]. (*Id.* at 165:19-166:14.) He testified that the portion of claim element 36[b], reciting "multicarrier modulation with DMT symbols that are mapped to one bit of the diagnostic message," is found in the C-RATES messaging scheme of G.992.1. (*Id.* at 158:24-159:5 and 166:24-167:14.) He testified that claim element 36[c] is disclosed in FI-071. (*Id.* at 167:20-168:20.) Lastly, he testified that claim element 36[d] is found in FI-071. (*Id.* at 168:21-169:14.)

include element 36[b] because diagnostic information from FI-071 would be transmitted using G.992.1's EOC (which does not map DMT symbols to one bit, as required by 36[b]). (*See id.* at 5–6.)

TQ Delta concedes that G.992.1 separately describes a modulation scheme called “C-RATES” that does map DMT symbols to one bit; it argues, however, that C-RATES has nothing to do with transmission of diagnostic messages. (*Id.* at 6, citing Dkt. No. 532 at 193:4–12; 194:24–195:2.) TQ Delta asserts that CommScope failed to put on evidence that a POSITA would have been motivated to modify FI-071 to use the C-RATES modulation scheme to transmit diagnostic messages when G.992.1 already had the EOC channel to do so. (*Id.*) Ultimately, TQ Delta argues that the JMOL of no invalidity of claim 36 should be granted on this ground alone—it asserts that CommScope failed to satisfy the requisite clear and convincing evidence burden of a motivation to combine or reasonable expectation of success. (*Id.*)

In addition to the impact on the requirement to establish motivation to combine, TQ Delta argues that CommScope’s failure to present sufficient evidence that the prior art includes claim element 36[b] is a separate basis to grant its JMOL. It challenges Dr. Cimini’s sole reliance on the C-RATES messaging scheme of G.992.1 to establish that the prior art discloses claim element 36[b]. (*Id.*) TQ Delta’s main argument is that a C-RATES message is not a “diagnostic message” and does not transmit diagnostic information as further required by claim element 36[c].³ (*Id.*) Dr. Cimini conceded that the C-RATES information is not diagnostic information. (Dkt. No. 532 at 194:25–195:2.) Further, TQ Delta points out that Dr. Cimini admitted that G.992.1’s existing messaging scheme for transmitting diagnostic information—the EOC—does not use a modulation

³ Claim element 36[c] recites “wherein the diagnostic message comprises a plurality of data variables representing the diagnostic information about the communication channel.” (*See Trial Ex. 2 at 12:66–13:2.*)

scheme in which DMT symbols are mapped to one bit, as recited in claim element 36[b]. (*Id.*, citing Dkt. No. 532 at 194:17-20.)

In response, CommScope argues that there was more than sufficient evidence of a motivation to combine the prior art references with a reasonable expectation of success. (Dkt. No. 546 at 2.) It points out that in introducing the FI-071 and G.992.1 reference combination to the Jury, Dr. Cimini testified that FI-071 itself indicates that it should be combined with ADSL (or G.992.1).⁴ (*See id.* at 2–3.) The abstract statement in FI-071, which was shown to the Jury, states: “[t]his paper proposes additional diagnostic information be specified in G.992.1bis and G.992.2bis [ADSL] including a quiet line PSD measurement and a line balance measurement.” (Dkt. No. 546-2 at 12.) Because the reference itself expresses that it should be combined with G.992.1, CommScope argues that there was sufficient evidence that a POSITA would have been motivated to combine the references with a reasonable expectation of success. (Dkt. No. 546 at 3.) Further, CommScope notes that TQ Delta did not cross-examine Dr. Cimini on this opinion or present any affirmative evidence to demonstrate no motivation to combine the FI-071 with G.992.1 with a reasonable expectation of success. (*Id.* at 4.)

In addressing TQ Delta’s argument that CommScope failed to present evidence that Element 36[b] was known in the prior art, CommScope points out that TQ Delta ignores substantial additional evidence presented to the Jury on that point. (*Id.*) CommScope demonstrates that Dr. Cimini testified that the subject matter of Element 36[b] was in the prior art “at least three separate times”; each time, he pointed to G.992.1’s disclosure of the C-RATES1 message in which “only

⁴ Dr. Cimini testified: “So we can see in the abstract right at the top that the paper – that the contribution wants to propose adding diagnostic information to G.992.1, which is ADSL, and in particular it wants to add quiet line power spectral density measurement, which is PSD, and a line balance measurement.” (Dkt. 532 at 160:9-23, referencing Dkt. No. 546-2 at 12 (presented to the Jury).)

one bit of information is transmitted in each symbol.”⁵ (*Id.* at 5.) Next, CommScope explains that the disclosure in the ’686 patent itself told a POSITA to use the C-RATES messaging scheme in conveying a diagnostic message.⁶ (*Id.* at 5.) Lastly, CommScope points to testimony of Robert Pizzano, a named inventor on the ’686 Patent, stating that the inventors intended for the C-RATES message scheme, as described in ADSL and the ’686 patent, to be used to send the diagnostic message described in the ’686 patent. (Dkt. 532 at 214:4-5, 214:18-25, 215:6-8, 215:12-20.) Thus, in addition to Dr. Cimini’s testimony, the Jury was in possession of the references themselves along with evidence of the ’686 Patent specification and inventor testimony. (Dkt. No. 546 at 7.)

TQ Delta contends that CommScope misses the mark with its argument because “[s]imply ‘adding quiet line power spectral density measurement’ from FI-071 to G.992.1 does not result in the claimed invention or render it obvious.” (Dkt. No. 554 at 1.) It argues that if the quiet line noise of FI-071 were added to the diagnostic messages of G.992.1 (as FI-071 suggests), the “natural result” would be the EOC scheme already utilized in G.992.1. (*Id.*) This means, according to TQ Delta, that neither reference discloses using the modulation scheme that Claim 36 requires. (*Id.*) Therefore, “the combination that would result from the only ‘motivation’ evidence CommScope identified would not result in the claimed invention and there would have been no reasonable expectation of success.” (*Id.*) TQ Delta urges that CommScope is attempting to show that POSITA would have been motivated to add FI-071’s quiet line noise to G.992.1’s diagnostic messages, but

⁵ Dr. Cimini testified that “a message with one bit per symbol” was already known in ADSL and the ’686 patent, as summarized in DDX-001.26. (*See* Dkt. 532 at 158:15-159:15.) Next, he mapped the disclosure of the ADSL reference to the express language of Element 36[b]. (*Id.* at 166:15-167:19.) Lastly, Dr. Cimini reiterated his point during redirect and testified that “Mr. Pizzano, the inventor, when asked that question, said that he -- about the ’686 patent, he said that that one-bit per symbol messaging was basically just reusing existing standardized symbols.” (*Id.* at 204:5-20.)

⁶ “*In the diagnostic link mode, the RT modem sends diagnostic and test information in the form of a collection of information bits to the CO modem that are, for example, modulated by using one bit per DTM symbol modulation, as is used in the C-Rates1 message in the ITU and ANSI ADSL standards, where the symbol may or may not include a cyclic prefix. ...*” (Tr. Ex. 2 (’686 Patent) at 3:44-50 (emphasis added).)

then would mix and match with a different modulation scheme found in an unrelated portion of G.992.1. (*Id.* at 1–2.) It reiterates that a POSITA would have no reason to use the C-RATES scheme because it is a scheme used for initialization, not transmission of diagnostic messages, and because G.992.1 already has a messaging scheme to transmit diagnostic messages. (*Id.* at 2.) TQ Delta asserts that this argument is further supported by the fact that CommScope elicited no evidence that the EOC is inadequate for transmitting diagnostic messages. (*Id.*)

TQ Delta further argues that the remainder of the evidence CommScope points to is unavailing. Regarding the disclosure of the ‘686 Patent, TQ Delta points out that the law is clear that a party cannot “use the challenged patent as a roadmap to reconstruct the claimed invention using disparate elements from the prior art – *i.e.*, the impermissible *ex post* reasoning and hindsight bias that *KSR* warned against.” (*Id.* at 3, citing *TQ Delta, LLC v. CISCO Systems, Inc.*, 942 F.3d 1352, 1361 (Fed. Cir. 2019).) In addressing Robert Pizzano’s testimony that the ‘686 Patent’s inventors intended for the C-RATES scheme to be used to send diagnostic messages, TQ Delta argues that his assertion does not support a finding of obviousness. (*Id.* at 3.) TQ Delta appears to argue that because the specific combination of “using one bit per DMT symbol to communicate diagnostic information” was not in either of the prior art references, Pizzano’s testimony does not help CommScope. (*See id.*) TQ Delta cites *In re Van Os* for the proposition that a conclusory assertion of motivation to combine—as it implies CommScope has done here—is inadequate. (*Id.* at 2, citing 844 F.3d 1359, 1361–62 (Fed. Cir. 2017).)

CommScope contends in response that it identified and presented ample evidence that a POSITA would have modified the combination of the FI-071 and G.992.1 to use the C-RATES message scheme to transmit a diagnostic message rather than the EOC scheme. (Dkt. No. 557 at 1.) CommScope adds that Mr. Pizzano, as an inventor of the ‘686 Patent and a POSITA, provided

a basis of motivation to use the C-RATES message scheme—“it was useful because its one-bit-per-symbol messaging scheme was ‘able to push [diagnostic] data through under the worst condition.’” (*Id.* at 2, citing Dkt. 532 at 215:12-20.) Contrary to TQ Delta’s argument, CommScope urges that there was nothing “conclusory” about the presented motivation to combine. (*Id.* at 2.)

Regarding TQ Delta’s argument that CommScope used hindsight bias by pointing the ‘686 disclosure itself, CommScope points out that Dr. Cimini explained that the patent specification describes a prior art messaging scheme to be used to convey a diagnostic message, and that fact was admitted by an inventor of the ‘686 Patent. (*Id.*) It contends this is not “akin to ‘us[ing] the challenged patent as a roadmap to reconstruct the claimed invention using disparate elements from the prior art,’” as TQ Delta claims. (*Id.* at 3, internal citations omitted.) Rather than combining disparate elements, use of the C-RATES messaging scheme to convey diagnostic information was encouraged by the prior art and, as the inventor testimony demonstrates, a POSITA would have been motivated to combine such elements to effectively transmit diagnostic information. (*Id.*)

The Court is not convinced by TQ Delta’s argument that the record was devoid of evidence regarding a motivation to combine and reasonable expectation of success, such that the jury verdict should be overturned. As CommScope explains in its briefing, it presented evidence that FI-071 itself recommended combination with ADSL (or G.922.1). This evidence alone provides a basis for a reasonable jury to find that a POSITA would have a motivation to combine the prior art references and a reasonable expectation of success in doing so. Further, Dr. Cimini testified multiple times that the subject matter of Element 36[b] was contained in the prior art, pointing to G.992.1’s disclosure of the C-RATES1 message.

Additionally, CommScope provided testimony from one of the inventors of the '686 Patent stating that the C-RATES scheme was “useful” because it was “able to push [diagnostic] data through under the worst condition.” (Dkt. 532 at 215:12-20.) Contrary to TQ Delta’s assertion, this constituted evidence demonstrating why a POSITA would be motivated to use the C-RATES messaging scheme (rather than the EOC scheme already contained in FI-071). TQ Delta’s argument that the combination of FI-071 and G.992.1 would not result in Element 36[b] is similarly unavailing. TQ Delta focuses on the EOC scheme’s nonconformity with that element, but acknowledges that C-RATES maps DMT symbols to one bit as required by Element 36[b]. Therefore, CommScope presented evidence of a motivation to combine the prior art reference combination with a reasonable expectation of success, and identified each element of claim 36 as known. Accordingly, the Court finds that sufficient evidence supports the Jury’s finding of invalidity.

ii. Disclosure of “Transceiver” Term in Prior Art Reference Combination

To prove invalidity, CommScope was required to demonstrate that the limitations of the claim as properly interpreted are met by the prior art. *See TI Grp. Auto. Sys. (N. Am.) Inc. v. VDO N. Am. L.L.C.*, 375 F.3d 1126, 1139 (Fed. Cir. 2004). TQ Delta argues that CommScope failed, in particular, to present evidence that either prior art reference includes a “transceiver” as the Court construed that term. (Dkt. No. 537 at 8.) Element 36[a] recites: “instructions that when executed direct a transceiver to receive or transmit an initiate diagnostic mode message.” (Trial Ex. 2 at 12:63-66.) The Court construed “transceiver” to mean “communications device capable of transmitting and receiving data where the transmitter portion and receiver portion share at least some common circuitry.” (Dkt. No. 169 at 15.) TQ Delta asserts that missing from CommScope’s evidence was any indication that either FI-071 or G.992.1 discloses a “transmitter portion and

receiver portion [that] share at least some common circuitry.” (Dkt. No. 537 at 9.) It additionally argues that Dr. Cimini did not even mention this construction during his testimony, only acknowledging that he’d reviewed and applied the Court’s constructions to his analysis. (*Id.*, citing Dkt. No. 532 at 153:20-23.)

CommScope points out that, as TQ Delta acknowledges, Dr. Cimini explicitly confirmed that he reviewed the Court’s constructions and applied them in his analysis. (Dkt. No 546 at 7, citing Dkt. No. 537 at 9.) Further, Dr. Cimini testified that FI-071 discloses “diagnostic information at both ends of the line, and it’s communicated over the loop.” (Dkt. No. 532 at 161:3–5.) This was supported by the language of FI-071, which states that “[t]here are occasions where diagnostic tests are performed from either end of the subscriber line.” (Dkt. No. 546-2 (Tr. Ex. 47) at COMMSCOPE000402; *see also* Dkt. No. 546-2 at 19, 30 (DDX-001.19, DDX-001.30).) Further, argues CommScope, the ADSL standard “includes extensive disclosure of a transceiver with common circuitry,” stating: “[ADSL] Transceivers on a metallic twisted pair that allows high-speed data transmission between the network operator end (ATU-C) and the customer end (ATU-R).” (Dkt. No. 546 at 8, citing Dkt. No. 546-2 at COMMSCOPE001024.) Both the ADSL standard and FI-071 were presented to the Jury. (*Id.*) CommScope asserts that this language demonstrates that the two ends are connected by common circuitry. (*Id.*) Lastly, CommScope notes that TQ Delta never contested at trial that the prior art reference combination disclosed a transceiver with common circuitry. (*Id.* at 9.)

TQ Delta argues in response that none of the evidence CommScope points to in its Opposition discusses shared or common circuitry. (Dkt. No. 554 at 4.) It points out that the Court’s construction of a “transceiver” requires transmission and receipt of data within a *single* communications device—it urges that CommScope attempts to establish common circuitry of *two*

devices, each found in a different location. (*Id.*) It notes that perhaps CommScope misunderstands the Court’s construction as referring to “transmitting by one device on one end of the line and receiving by a different device on the other end of the line.” (*Id.*) TQ Delta asserts that this is evidenced by CommScope’s reliance on the ADSL standard’s language (quoted *supra*) and argument that “[s]uch disclosure makes it clear that the transceiver shares at least some common circuitry to convey information from one end of the line (“ATU-C receiver”) to the other (“ATU-R”). (Dkt. No. 554 at 4–5.) However, argues TQ Delta, “the claimed ‘transceiver’ is not the combination of the ATU-C and the ATU-R at different ends of the telephone line and the ‘shared circuitry’ is not the metallic twisted pair that runs between the two ends.” (*Id.* at 5.) Lastly, it argues that CommScope’s experts did not testify that the portions of prior art that it now relies on showed disclosure of a transceiver at trial. (*Id.*)

CommScope argues that its cited evidence does demonstrate that the prior art meets the Court’s construction as described by TQ Delta. (Dkt. No. 557 at 4 n.1.) It asserts that specifically, “the transceivers on each end of the loop are capable of *both* transmitting and receiving in a single device by virtue of being able to receive ‘diagnostic information at both ends of the line.’” (*Id.*, quoting Dkt. No. 546 at 7–8.) Therefore, urges CommScope, the transceivers in the prior art disclose use of common circuitry, and contrary to TQ Delta’s assertion, these portions of the prior art were relied on to demonstrate the disclosure by the prior art of a transceiver at trial. (*Id.*; *see also id.* at 5 n.2, citing Dkt. No. 532 at 161:3–6.) It notes that, like in *Genband v. Metaswitch*, CommScope has pointed to specific evidence in the trial record where its witnesses provided testimony that the pertinent claim was satisfied by the prior art. (*Id.* at 4–5, citing 2016 WL 5480908, at *22 (E.D. Tex. Sept. 29, 2016) (denying JMOL where the defendant argued that plaintiff’s expert failed to present specific evidence that the accused products met the court’s

construction of a particular limitation.) CommScope concludes that the Jury had a sufficient evidentiary basis for invalidity, especially in light of TQ Delta’s failure to present any witness at trial to testify as to validity regarding the ‘686 Patent. (*See id.* at 5.)

Again, the Court is unpersuaded by TQ Delta’s arguments. After a fulsome review of the record, the Court finds that supporting evidence is not so lacking as to justify overturning the jury verdict. Dr. Cimini testified that FI-071 discloses “diagnostic information at both ends of the line, and it’s communicated over the loop.” (Dkt. No. 532 at 161:3–5.) The Jury determined, as it was entitled to, that this meant the prior art reference disclosed common circuitry because the transceivers on each end of the loop were capable of both transmitted and receiving. Further, CommScope supported Dr. Cimini’s testimony at trial with language from FI-071 and ADSL, both of which were presented to the Jury. The burden was CommScope’s, but as it points out, TQ Delta failed to present contrary evidence at trial to convince the Jury of its current theory that the prior art references did not disclose a transceiver as construed by the Court. The fact that Dr. Cimini did not recite the specific words of the Court’s construction does not make his testimony insufficient *per se*. Dr. Cimini testified that he read and relied on the Court’s construction of the terms, the Jury had the definitions on hand during its deliberations, and CommScope provided evidence that allowed the Jury to determine the prior art disclosed a “transceiver” as construed.

B. Claim 10 of the ‘835 Patent

TQ Delta also asserts that CommScope failed to present legally sufficient evidence by which a reasonable jury could have found by clear and convincing evidence that claim 10 of the ‘835 Patent was invalid either under a theory of anticipation or obviousness under 35 U.S.C. §§ 102 and 103. (Dkt. No. 537 at 2.) Specifically, TQ Delta contends that CommScope failed to present any evidence at trial that either of the prior art references it relied on for claim 10 of the

835 Patent include a “transceiver,” as the Court construed that term. (*Id.* at 9.) Claim 10 of the ’835 Patent depends on claim 8; Element 8[a] recites: “a transceiver, including a processor, configurable to[.]” (Trial Ex. 6 at 21:36). As explained above, the Court construed the term “transceiver” as “communications device capable of transmitting and receiving data where the transmitter portion and receiver portion share at least some common circuitry.” (Dkt. 169 at p. 15.)

Similarly to its argument regarding the transceiver term in the ’686 Patent, TQ Delta asserts that CommScope’s expert, Mr. McNair, did not discuss or mention the Court’s construction during his testimony, nor did he demonstrate that the ADSL standard meets the claim term as construed. (Dkt. No. 537 at 10.) It further argues that at best, Mr. McNair simply identified that the word “transceiver” is used in the ADSL standard, which is insufficient to demonstrate that the prior art meets the Court’s construction of the term. (*Id.* at 10–11; *see also* Dkt. No. 554 at 5.)

CommScope contends otherwise, arguing that Mr. McNair testified that the prior art itself, in particular the ADSL standard document, includes ATUs, which are “ADSL transceiver units,” and he agreed that there is “[n]o question that ADSL talks about transceivers that have processors.” (Dkt. No. 546 at 9, citing Dkt. 532 at 308:7-18; *see also id.* at 298:18-21 (Mr. McNair testifying that the ADSL standard “ha[s] every single element that’s required by claim 10 of the ’835 Patent”)). CommScope asserts that Mr. McNair’s testimony is supported by the language of the ADSL contribution, “making it clear that within the transceiver, the transmitter portion and receiver portion share at least some common circuitry.” (*Id.* at 9–10, citing Dkt. No. 546-2 (Tr. Ex. 48) at COMMSCOPE001024.) Lastly, CommScope again points out that TQ Delta did not take the opportunity to contest that ADSL disclosed a transceiver with common circuitry during trial. (*Id.* at 10.)

The Court's opinion of TQ Delta's argument here is much the same as its view of its similar argument regarding claim 36 of the '686 Patent. Again, Mr. McNair testified that he read and relied on the Court's construction of the terms, the Jury had the definitions at hand during its deliberations, and CommScope provided evidence that allowed the Jury to determine the prior art disclosed a "transceiver" as construed. Indeed, Mr. McNair specifically testified that the ADSL standard disclosed every element required by claim 10 of the '835 Patent. TQ Delta's argument fails to justify overturning the Jury's verdict.

C. Motion for New Trial

TQ Delta points out that the Jury's verdict found that CommScope infringed claim 36 of the '686 Patent and claim 10 of the '835 Patent; as such, it argues that to the extent the Court enters JMOL of no invalidity of either claim, a new trial is necessary to determine infringement damages. Since the Court declines to enter JMOL as to either claim, the request for new trial is superfluous.

IV. CONCLUSION

Having considered the parties' briefing and the entire record, the Court is persuaded that CommScope introduced substantial evidence that is adequate to support the Jury's verdict as to invalidity as to the two claims at issue. Accordingly, TQ Delta's Motion (Dkt. No. 537) is **DENIED**.

So Ordered this

Aug 24, 2023



RODNEY GILSTRAP
UNITED STATES DISTRICT JUDGE